

## ABSTRACT OF THE DISCLOSURE

A dielectric loaded antenna apparatus is provided with a column-shaped loaded dielectric which is loaded on an end portion of a feeding line of the dielectric loaded antenna apparatus. The loaded  
5 dielectric has an inclined radiation surface which is inclined from a surface perpendicular to an axial direction of the loaded dielectric. A cross section of the loaded dielectric perpendicular to the axial direction of the loaded dielectric has a shape of one of circle, ellipse and polygon. The feeding line is a waveguide which includes radiation  
10 waveguide and a feeding waveguide. The radiation waveguide has an axis parallel to the axial direction of the loaded dielectric and includes an opening for feeding an electromagnetic wave to the loaded dielectric. The feeding waveguide feeds the electromagnetic wave to the radiation waveguide.